## LIV.—Podocerus and Jassa of Leach. By ALFRED O. WALKER.

MR. STEBBING'S unrivalled knowledge of the literature of the Amphipoda and the careful accuracy of his work are so well known that a corroboration of the conclusion he arrived at in the paper in the March number of this Journal, viz. that the true Podocerus of Leach is Platophium Darwinii (Bate), is scarcely needed. Nevertheless, as the revolution in nomenclature caused by this discovery is so serious that persons may be found who will object that something more is required to support it than Milne-Edwards's admittedly inaccurate description and figures, I venture to offer the following evidence. Having ascertained, by examination of Leach's type specimen last October, that Jassa pelagica, Leach, was not the female of Podocerus falcatus (Mont.), but was (to use G. O. Sars's name) Janassa capillata (Rathke), I was led to undertake an examination of the history of the genus Podocerus, in which I have always taken a special interest. I was of course not aware that Mr. Stebbing was doing the same. I arrived substantially at the same conclusions as Mr. Stebbing, but, unlike him, was unable to identify Milne-Edwards's description and figure with any known Amphipod, as I could not suppose him to have invented the dorsal teeth on the three segments. I therefore postponed the conclusion of a paper I had written on the subject till I could again examine the type specimens of *Podocerus variegatus*, Leach, at the British Museum. This was delayed through a visit of six weeks to the south of France, and it was only in passing through London on my way home in the middle of March that I was able to do so with the kind assistance of Mr. R. I. Pocock. Neither he nor I then knew of Mr. Stebbing's paper. so that the opinion we both formed was absolutely unbiassed.

The type specimens, of which there are several, are either pierced with a pin or gummed on a piece of card. There are at least two species among them, one being apparently the female or young of *P. falcatus* (Mont.). The other, however, we had no difficulty in deciding to be the species Milne-Edwards intended to represent *minus the dorsal teeth*. The antennæ, fortunately, are nearly perfect, and though the first gnathopods are either gone or hidden, yet the second gnathopods, a first or second perceopod, and one or two of the last percopods still remain. Mr. Pocock and I agreed that these corresponded with *Platophium*; but having Sars's figure of *Lactmatophilus* (*Platophium*) *tuberculatus* (Bruz.) before us, and supposing him to be right in uniting *Cyrtophium Darwinii*, Bate, with that species, we were not satisfied with the identity of the specimen. It seems, however, that Sars was in error in uniting these two species; and when, on reaching home a few days later, I had an opportunity of examining specimens of *C. Darwinii* from the Devonshire coast, I had no longer any doubt of their identity with the British Museum specimen. It is therefore clear that Milne-Edwards's *P. varie-gatus* is *Platophium Darwinii* (Bate); and as it agrees in its prominent eyes and the apparently nearly straight side of the hand of the second gnathopods with Leach's description much more closely than does *P. fulcatus* (Mont.)  $\varphi$ , the conclusion arrived at by Mr. Stebbing seems irresistible.

As regards the question Mr. Stebbing raises, whether Jassa talcata (Mont.) should be superseded by Jassa pulchella. Leach, on the ground that the former species "remains .... indeterminate," I am " bold " enough to say that I have no doubt that Montagu's species is the immature male of Leach's Jassa pulchella. As the author of Podocerus Herdmani (P. odontonyx, G. O. Sars), I can hardly be suspected of a bias in the direction of destroying that species; yet the experience gained since it was established has satisfied me that neither size nor the depth of water at which a species may have been taken are characters of any value. For instance, the largest specimen of Jassa falcata (Mont.) in my collection (an adult male measuring 10 millim, in length) was taken in 50 fathoms off Holyhead, while I have specimens of the so-called P. Herdmani from quite shallow water. The above large specimen has a distinct tooth on the dactylus, and I have specimens with the tooth of various degrees of prominence. The length of Montagu's specimen is given as 5 lines (say 10 millim.), but as he gives the length of Gammarus locusta, Linn., in the same paper as 1 inch (25 millim.), which is not only longer than the largest specimen I have from these coasts, but also than the maximum size given by Sars (20 millim.) for specimens from the Norway coast, it is quite possible that he may have included the antennæ in his measurement. I will therefore conclude by expressing a hope that the time-honoured specific name of falcata (Montagu) may be spared to us in the general wreck of the Podoceridæ.

Colwyn Bay, April 5, 1899.